KONINKLIJKE AKADEMIE VAN WETENSCHAPPEN
TE AMSTERDAM

PROCEEDINGS OF THE SECTION OF SCIENCES

Q
57
P75
v.30.
1927
PER

VOLUME XXX

PUBLISHED BY
KONINKLIJKE AKADEMIE VAN WETENSCHAPPEN, AMSTERDAM
1927

KONINKLIJKE AKADEMIE VAN WETENSCHAPPEN
TE AMSTERDAM

PROCEEDINGS OF THE SECTION OF SCIENCES

VOLUME XXX
(Nos. 6—10)

PUBLISHED BY
KONINKLIJKE AKADEMIE VAN WETENSCHAPPEN, AMSTERDAM
1927

(Translated from: Verslag van de gewone vergaderingen der Afdeeling Natuurkunde, Vols. XXXIV, XXXV and XXXVI).

CONTENTS

Proceedings No. 6 627

„ No. 7 727

„ No. 8 839

„ Nos. 9 and 10 943

2781
17

CONTENTS

ADJUSTMENT (Linear) of a set of pairs of numbers (x_k, y_k). 1021.

AGARSOLS (The flocculation of) through salt mixtures. 740.

AGGLUTINATION (Experiments on the differential characters of Leptospira-strains with introductory remarks on the process of) and lysis. 25.

ALCOHOLS (The light oxydation of) as contribution to the knowledge of the photochemical phenomena. 189.

ALKALI BORON FLUORIDES (On some phenomena which are caused by the low indices of refraction of). 350.

ALKYLANILINES (Formation of derivatives of dihydrobenzimidazole and tetrahydrochinoxaline by the action of acetic anhydride and zinc chloride on nitroderivates of). 844.

AMINE (On some derivatives of di-(2-pyridyl)-) and on tri-(2-pyridyl)-). 664.

AMPHIOXUS (Observations on the adhesive apparatus and the function of the ilio-colonring in the living larva of) in the growth-period. 991.

ANALYSIS SITUS (On the foundations of combinatory). Additions and corrections. 670.

Anatomy. C. U. ARIËNS KAPPERS: "Indices for the anthropology of the brain applied to Chinese, dolicho-and brachycephalic Dutch, foetuses and neonati." 81.

— J. MULLER: "On the occurrence of vascularized Enamel-organs". 298.

— MA (WEN CHAO): A comparison of the form of the callosum and septum in Chinese, Philippino and Dutch brains." 329.

— E. HORNE CRAIGIE and RICHARD M. BRICKNER: "Structural parallelism in the midbrain and tweenbrain of teleosts and of birds." 695.

— L. COENEN: "The connection of the cortex with the Neostriatum and Palaeostriatum in rabbits." 811.

ANCHYLOSTOMA (The Nemas) and Necator. 113; II. 581.

— (New researches on the larvae of) duodenale DUB, and Necator americanus STILES. 581.

ANDREWS (DONALD H.) and W. H. KEESOM. The specific heats of solid substances at the temperatures attainable with the help of liquid helium. I. Measurements of the atomic heat of lead. 434.

ANHYDRIDE (Formation of derivatives of dihydrobenzimidazole and tetrahydrochinoxaline by the action of acetic) and zinc chloride on nitroderivates of alkylanilines. 844.

ANOPHELISM (On) without malaria around Amsterdam. 61.

Anthropology. L. BOLK: "On the origin of human races." 320.

A. J. P. VAN DEN BROEK: "On the continuance of the increase of stature in Holland." 685.

ANTHROPOLOGY OF THE BRAIN (Indices for the) applied to Chinese, dolicho-and brachycephalic Dutch, foetuses and neonati. 81.

ANTIBERIBERI-VITAMIN (Experiments with JANSEN and DONATH'S). 376.

APHTHAE EPIZOÖTICAE (On the mutual immunization in) and vaccine. 543.

ARGON (The duration of metastable states of neon,) and helium. 33.

ARIËNS KAPPERS (C. U.) vide KAPPERS (C.U. ARIËNS).

Astronomy. ADRIAAN VAN MAANEN: "The proper motions of the globular clusters Messier 13, 56 and 2 and their internal motions." 681.

— A. PANNEKOEK and M. G. J. MINNAERT: "Preliminary report on the expedition to Lapland for the observation of the total solar eclipse of June 29th 1927". 921.

AVENA SATIVA (On the light-growth-reactions in different zones of the coleoptile of). 2.

— (On growth-accelerating substances in the coleoptile of). 10.

BACILLUS TYPHI (On the disappearance of) from water. 444.

BACILLUS *BTTx* (Concerning the transmutant of the tubercle-) as tuberculosis-diagnosticum. 643.

BAND λ 6087 (The structure of the calcium fluoride). 355.

BASTIDE (G. L. C. LA) and J. P. WIBAUT. On some derivatives of di- (2-pyridyl)-amine, and on tri-(2-pyridyl)-amine. 664.

BEMMELEN (J. F. VAN). Heredity of mental faculties. 769.

BENDER (LAURETTA). An experimental study of the cerebellar control of the vocal organs. 715.

BEREK (On M. BEREK'S Methode der charakteristischen Gangunterschiedsverhältnisse). 534.

Biochemistry. A. J. KLUYVER and A. P. STRUYK: "The so-called co-enzyme of alcoholic fermentation". 569.

— A. J. KLUYVER and A. P. STRUYK: "The first phases of the chemistry of the dissimilation of the hexoses". 871.

BIRATIONAL CORRESPONDENCE (The quadratic) between two linear complexes of rays. 657.

BLAAUW (A. H.). On the atmospheric humidity during the flower-formation of the hyacinth. 206.

BOEKELMAN (A. J.), C. H. H. SPRONCK, K. HOEFNAGEL and W. HAMBURGER. Concerning the transmutant of the tubercle-bacillus BTT_x as tuberculosis-diagnosticum. 643.

BOER (J. H. DE). On some phenomena which are caused by the low indices of refraction of alkali boron fluorides. 350.

BOER (S. de). The action of veratrin on skeletal muscles. At the same time an application of our knowledge of the segmentation of the frog's M. gastrocnemius on the problem of the refractory stage of skeletal muscles after veratrin poisoning. 235.

BOER (S. R. DE). The influence of temperature on the respiration of Phycomyces Blakesleeanus Burgeff. 674.

BÖESEKEN (J.). Some remarks on the condensation products of polyoxy-compounds with chloral. 55.

— The light oxydation of alcohols as contribution to the knowledge of the photochemical phenomena. 189.

BOLK (L.). On the origin of human races. 320.

BORTOLOTTI (E.). On metric connexions with absolute parallelism. 216. Erratum 431.

BOSCHMA (H.). On the larval forms of Rhizocephala. 293.

Botany. C. VAN DILLEWIJN: "On the light-growth-reactions in different zones of the coleoptile of Avena sativa". 2.

Botany. F. W. WENT: "On growth-accelerating substances in the coleoptile of Avena sativa". 10.

— IDA LUYTEN: "On the favorable effect of 35° C. on the cell-formation in foliage-leaves of Hyacinthus orientalis". 197.

— A. H. BLAAUW: "On the atmospheric humidity during the flower-formation of the hyacinth". 206.

— IDA LUYTEN: "Rapid flowering of early tulips". 502.

— S. R. DE BOER: "The influence of temperature on the respiration of Phycomyces Blakesleeanus Burgeff". 674.

— CHRISTINE J. GORTER: "On the occurrence of growth-accelerating and growth-retarding substances". 728.

— NANNY TENDELOO: "On the so-called traumatotropic curvatures of oat seedlings". 756.

— WILLEMINA M. COELINGH: "On the retarding influence of the longitudinal component of gravity on the geotropic reaction of roots of Pisum sativum. 930.

BOTTEMA (O.). The definition of Euclidean measure in the projective plane. 423.

BRAIN (Indices for the anthropology of the) applied to Chinese, dolicho- and brachycephalic Dutch, foetuses and neonati. 81.

BRAINS (A comparison of the form of the callosum and septum in Chinese, Philippino and Dutch). 329.

BRICKNER (RICHARD M.) and E. HORNE CRAIGIE. Structural parallelism in the midbrain and tweenbrain of teleosts and of birds. 695.

BROEK (A. J. VAN DEN). On the continuance of the increase of stature in Holland. 685.

BROUWER (H. A.). Fractures and faults near the surface of moving geanticlines. IV. The elastic rebound of the earth crust in Central Honshu. 272.

BRUIN (T. L. DE). Note on regularities in the spectra of fluorine and chlorine. 20.

— The structure of the fluorine spectrum (F. I.). 944.

BUCK (A. DE), E. SCHOUTE and N. H. SWELLENGREBEL. On anophelism without malaria around Amsterdam. 61.

BÜCHNER (E. H.) and D. KLEIJN. The flocculation of agarsols through salt mixtures. 740.

BIJLMER (H. J. T.) and W. A. MIJSBERG. Report on a fossil found at Trinil in 1926, and erroneously considered as the remains of a skull of Pithecanthropus. 126.

CAESALPINIA SAPPAN L. (The essential oil from the leaves of). 840.

CALCIUM FLUORIDE BAND λ 6087 (The structure of the). 355.

CALLOSUM (A comparison of the form of the) and septum in Chinese, Philippino and Dutch brains. 329.

CANTORSCHE MANNIGFALTIGKEITEN (Zusammenhangsstufen und). 705.

CARCINOLYTIC PROPERTIES (On the isolation of a substance with) from the reticulo-endothalial system. 499.

CATE (J. TEN). On the segmental innervation of the skin of rays. 734.

CELL-FORMATION (On the favorable effect of 35° C. on the) in foliage-leaves of Hyacinthus orientalis. 197.

CHANXHE (Profiles through the synclines of Comblain au Pont and). 346.

Chemistry. J. BÖESEKEN: "Some remarks on the condensation products of polyoxy-compounds with chloral". 55.

Chemistry. J. BÖESEKEN: "The light oxydation of alcohols as contribution to the knowledge of the photo-chemical phenomena". 189.

— F. M. JAEGER, H. G. K. WESTENBRINK and F. A. VAN MELLE: "Roentgenspectrographic investigations on the structure of the artificial ultramarines and the problem concerning their relations to the minerals Hauyne, Nosean, Sodalite, Lazurite and Nephelite". 249.

— F. A. H. SCHREINEMAKERS: "Equilibria in systems in which phases, separated by a semi-permeable membrane." XIX. 282, XX. 401, XXI. 521; XXII. 610; XXIII. 635.

— F. M. JAEGER and F. A. VAN MELLE: "Investigations into the constitution of artificial ultramarines. II. On ultramarine-blue with high silica-content and on silver-, silver-sodium-, selenium- and silverselenium-ultramarines". 479.

— J. P. WIBAUT and G. L. C. LA BASTIDE: On some derivatives of di-(2-pyridyl)-amine, and on tri-(2-pyridyl)- amine". 664.

— E. H. BÜCHNER and D. KLEIJN: "The flocculation of argarsols through salt mixtures". 740.

— F. A. H. SCHREINEMAKERS: "Osmosis of ternary liquids". General considerations, I. 761; II. 934; III. 1095; IV. 1106.

— P. VAN ROMBURGH: "The essential oil from the leaves of Caesalpinia Sappan L." (Provisional communication) 840.

— P. VAN ROMBURGH and H. W. HUYSER: "Formations of derivatives of dihydrobenzimidazole and tetrahydrochinoxaline by the action of acetic anhydride and zinc-chloride on nitroderivates of alkylanilines". 844.

— F. M. JAEGER and F. A. VAN MELLE: "Investigations into the structure of the artificial ultramarines. III. On silver- and alcali-silver ultramarines which are derivatives of GUIMET'S ultramarine-blue with high silica-content and on mixed alcali-ultramarines and norm. butyl-silver-ultramarine". 885.

— F. M. JAEGER and E. ROSENBOHM: "On the exact determination of the specific heat of solid substances between 0° and 1625° C. I. Method and apparatus. 905.

— A. L. TH. MOESVELD and WILHELMA A. T. DE MEESTER: "The influence of pressure on the reaction velocity and the function of the medium". 1039.

— F. M. JAEGER and E. ROSENBOHM: "On the accurate measurement of the specific heat of solid substances between 0° and 1625° C. II. The specific heat of platinum and tungsten". 1069.

CHLORAL (Some remarks on the condensation products of polyoxy-compounds with). 55.

CHLORIDE (On the absorption-spectrum of chromium-oxy-). 95.

— (Formation of derivatives of dihydrobenzimidazole and tetrahydrochinoxaline by the action of acetic anhydride and zinc) on nitroderivates of alkylanilines. 844.

CHLORINE (Note on regularities in the spectra of fluorine and). 20.

CHORDS (On the mean values of straight and curved) of geometrical bodies. 860.

CLAUSING (P.). On the mean values of straight and curved chords of geometrical bodies. 860.

CLAY (An hypothesis explaining some characteristics of). 104.

CLAY (J.). Penetrating radiation. 1115.

CLUSTERS MESSIER 13, 56 and 2 (The proper motions of the globular) and their internal motions. 681.

COALMINING (Earth movements, caused by). 864.

COEFFICIENT (The fundamental pressure-) of helium. 970.

COEFFICIENTS (Method of calculating the mean errors of the standard deviations) of correlation and coefficients of regression, with *n* linearly correlated variables. 823.

COELINGH (WILLEMINA M.). On the retarding influence of the longitudinal component of gravity on the geotropic reaction of roots of Pisum sativum. 930.

COENEN (L.). The connection of the cortex with the Neostriatum and Palaeostriatum in rabbits. 811.

COETERIER (F.) and A. MICHELS. The ice-point of the thermometer scale. 1017.

COLEOPTILE (On the light-growth-reactions in different zones of the) of Avena sativa 2.

— (On growth-accelerating substances in the) of Avena sativa. 10.

COLLINEATIONS (Systems of plane). 559.

COLUMBA DOMESTICA (An anatomo-physiological study of the supra-vestibular tractus in). 455.

COMBLAIN AU PONT (Profiles through the synclines of) and Chanxhe. 346.

CONDUCTIVITY (Influence of the pressure on the electric) of gold. 47.

CONGRUENCE (A) of plane monoids. 566.

— (A representation of the) of REYE. 850.

— (Representation of a bilinear) of conics. 988.

CONICS (A complex of). 268.

— (Representation of a bilinear congruence of). 988.

CONNEXIONS (The invariants of linear) with different transformations. 276.

CORTEX (The connection of the) with the Neostriatum and Palaeostriatum in rabbits. 811.

CRAIGIE (E. HORNE) and RICHARD M. BRICKNER. Structural parallelism in the midbrain and tweenbrain of teleosts and of birds. 695.

CRESOL (The three-phase-lines of the systems : water-ortho-, water-meta- and water para-). 52

CROMMELIN (C. A.) and R. O. GIBSON. The vapour pressures of solid and liquid neon. 362.

— H. GARFIT WATTS and E. MATTHIAS. On the rectilinear diameter of ethylene. 1057.

— and H. GARFIT WATTS. Vapour tensions of liquid ethylene. 1057.

— and H. GARFIT WATTS. Preliminary isotherms of ethylene. 1059.

Crystallography. W. NIEUWENKAMP : "On M. BEREK'S Methode der charakteristischen Gangunterschiedsverhältnisse" 534.

— C. H. EDELMAN : "On quaternary symbols of zones". 980.

CUBICS (A one-four representation of a complex of twisted) on the points of space. 1010.

CURVATURES (On the so-called traumatotropic) of oat seedlings. 756.

DANAUFORMATION (On the occurrence of the) in Martapura (S. E. Borneo). 338.

DEVIATIONS (Method of calculating the mean errors of the standard), coefficients of correlation and coefficients of regression, with *n* linearly correlated variables. 823.

DIAMETER (On the rectilinear) of ethylene. 1054.

DIHYDROBENZIMIDAZOLE (Formation of derivatives of) and tetrahydrochinoxaline by the action of acetic anhydride and zinc chloride on nitro derivates of alkylanilines. 844.

DILLEWIJN (C. VAN). On the light-growth-reactions in different zones of the coleoptile of Avena sativa. 2.

DIMENSIONELLE STRUKTUR (Das Hauptproblem über die) der Räume. 138.

DISCOASTERIDAE incertae sedis. 411.

DJAMBI (Sumatra) (Some remarks concerning the palaeozoic flora of). 628.

DONATH (Experiments with antiberiberi-vitamin of JANSEN and). 376.

DORGELO (H. B.) and T. P. K. WASHINGTON. The duration of metastable states of neon, argon and helium. 33.

DRUIF (J. H.). A contribution regarding the mineralogical composition of some of the soils of the Netherlands. 365.

DRYASFLORA (On a) -bearing deposit in the Netherlands. 344.

DUBOIS (EUG.). The so-called new Pithecanthropus skull. 134.

EARTH MOVEMENTS, caused by coalmining. 864.

EDELMAN (C. H.). On quaternary symbols of zones. 980.

ELLEMEET (The meteorite of). 724.

ENAMEL-ORGANS (On the occurrence of vascularized). 298.

ENERGY (Investigations on the free) of a mixture of ions. 145.

ENZYME (The so-called co-) of alcoholic fermentation. 569.

EQUATION OF STATE (On the) of solid substances. IV. Conclusion. 383.

EQUILIBRIA in systems in which phases, separated by a semi-permeable membrane. XIX. 282; XX. 401; XXI. 521; XXII. 610; XXIII. 635.

ERRATUM. 431, 626.

ERRORS (Method of calculating the mean) of the standard deviations, coefficients of correlation and coefficients of regression with n linearly correlated variables. 823.

ETHYLENE (On the rectilinear diameter of). 1054.

— (Vapour tensions of liquid). 1057.

— (Preliminary isotherms of). 1059.

EUCLIDEAN MEASURE (The definition of) in the projective plane. 423.

EYKMAN (C.). Experiments with JANSEN and DONATH'S antiberiberi-vitamin. 376.

FERMENTATION (The so-called co-enzyme of alcoholic). 569.

FIBRATION (On differential). 1062.

FLOCCULATION (The) of agarsols through salt mixtures. 740.

FLORSCHÜTZ (F.). On a Dryasflora-bearing deposit in the Netherlands 344.

FLUORIDES (On some phenomena which are caused by the low indices of refraction of alkali boron). 350.

FLUORINE (Note on regularities in the spectra of) and chlorine. 20.

— (The structure of the) spectrum (F. J.). 944.

FOSSIL FOUND (Report on a) at Trinil in 1926, and erroneously considered as the remains of a skull of Pithecanthropus. 126.

FUNDAMENTALSATZES (Zum Beweise des zweiten) der symbolischen Methode. 166.

GANGUNTERSCHIEDSVERHÄLTNISSE (On M. BEREK'S Methode der charakteristischen). 534.

GARFIT WATTS (H.). vide WATTS (H. GARFIT).

GASES (On the luminescence produced by bombarding solidified) with electric rays at the temperature of liquid helium. 514.

GEANTICLINES (Fractures and faults near the surfac of moving) IV. The elastic rebound of the earth crust in Central Honshu. 272.

GEELS (P.), A. MICHELS and Miss C. VERAART. Influence of the pressure on the electric conductivity of gold. 47.

GENERATIONS (A statistic inquiry into the psychic differences between the) of to-day and former times. 958.

Genetics. J. F. VAN BEMMELEN: "Heredity of mental faculties". 769.

Geology. H. A. BROUWER: "Fractures and faults near the surface of moving geanticlines. IV. The elastic rebound of the earth crust in Central Honshu". 272.

— L. H. KROL: "On the occurrence of the Danauformation in Martapura (S. E. Borneo)". 338.

— P. ROGGEVEEN: "Profiles through the synclines of Comblain au Pont and Chanxhe". 346.

— W. NIEUWENKAMP: "The meteorite of Ellemeet. 724.

— J. VERSLUYS: "The compacting pressure of sediments". 1004.

Geology (Applied) . J. VERSLUYS: " Earth movements caused by coalmining". 864.

GEOMETRICAL INTRODUCTION (Analytical introduction of the trigonometrical functions, adopted to the). 474.

GIBSON (R. O.) and C. A. CROMMELIN. The vapour pressures of solid and liquid neon. 362.

GOLD (Influence of the pressure on the electric conductivity of). 47.

GORTER (GHRISTINE J.). On the occurrence of growth-accelerating and growth-retarding substances. 728.

GOUDSMIT (S.). The structure of the calcium fluoride band λ 6087. 355.

GRAVITY (Provisional results of determinations of), made during the voyage of Her Majesty's submarine K XIII from Holland via Panama to Java. 743.

— (On the retarding influence of the longitudinal component of) on the geotropic reacton of roots of Pisum sativum. 930.

GROWTH-ACCELERATING SUBSTANCES (On) in the coleoptile of Avena sativa. 10.

— (On the occurrence of) and growth retarding substances. 728.

GROWTH-REACTONS (On the light-) in different zones of the coleoptile of Avena sativa. 2.

HAAF (E. C. F. TEN) and A. MICHELS. The three-phase-lines of the systems: water-orthocresol, water-metacresol and water-paracresol. 52.

HAAS (W. J. DE) and M. KINOSHITA. Rigidity of super-conductive metals. 598.

HALOS (Contribution to the explanation of complex) 172.

HAMBURGER (W.), A. J. BOEKELMAN, C. H. H. SPRONCK and K. HOEFNAGEL. Concerning the transmutant of the tubercle-bacillus B T Tx as tuberculosis-diagnosticum. 643.

HAUYNE (Roentgenspectrographic investigations on the structure of the artificial ultramarines and the problem concerning their relations to the minerals) Nosean, Sodalite Lazurite and Nephelite. 249.

HEART (On the origin of the radiation substances and their action on the). 624.

HEAT (On the exact determination of the specific) of solid substances between 0° and 1625° C. I. Method and apparatus. 905; II. The specific heat of platinum and tungsten. 1069.

— (The melting-curve of helium and the) -theorem of NERNST. 952.

— (The melting-point line of helium and NERNST's theorem of). 957.

HEATS (On the) resp. pressures of evaporation sublimation and melting, also in the neighbourhood of the absolute zero, in connection with NERNST's so-called heat-theorem. (On the equation of state of solid substances. IV. Conclusion). 383.

— (The specific) of solid substances at the temperatures attainable with the help of liquid helium I. Measurements of the atomic heat of lead. 434.

HEDROCYSTIS PELLUCIDA HERTW. & LESS (On the structure, life-history and development of). 308.

HEEL (A. C. S. VAN). On the absorption-spectrum of chromium-oxy-chloride. 95.

HELIUM (The duration of metastable states of neon, argon and). 33.

— (On the course of the meltingpoint-line of) at very low temperatures. 244.

— (The specific heats of solid substances at the temperatures attainable with the help of liquid). I. Measurements of the atomic heat of lead. 434.

— On the luminescence produced by bombarding solidified gases with electric rays at the temperature of liquid). 514.

— (The melting-curve of) and the heat theorem of NERNST. 952.

— (The melting-point line of) and NERNST's theorem of heat. 957.

— (The fundamental pressure-coefficient of). 970.

HEREDITY of mental faculties. 769.

HERINGA (G. C.) and M. MINNAERT. Concerning an optic phenomenon in tendons. III. 594.

HEXOSES (The first phases of the chemistry of the dissimilation of the). 871.

Histology. G. C. HERINGA and M. MINNAERT: „Concerning an optic phenomenon in tendons". III. 594.

HOEFNAGEL (K.), W. HAMBURGER, A. J. BOEKELMAN and C. H. H. SPRONCK. Concerning the transmutant of the tubercle-bacillus BTTx as tuberculosis-diagnosticum. 643.

HONSHU (Fractures and faults near the surface of moving geanticlines. IV. The elastic rebound of the earth crust in Central). 272.

HOOGENRAAD (H. R.). On the structure, life-history and development of Hedrocystis pellucida HERTW. & LESS. 308.

HORMONES (Radiation-substances and cardiae). 184.

HORST (Miss H. VAN DER) and W. H. KEESOM. The fundamental pressure-coefficient of helium. 970.

HUMIDITY (On the atmospheric) during the flowerformation of the hyacinth. 206.

HUREWICZ (W.). Ueber stetige Bilder von Punktmengen. 159.

— Ueber das Verhältnis separabler Räume zu kompakten Räumen. 425.

HUYSER (H. W.) and P. VAN ROMBURGH. Formation of derivatives of dihydrobenzimidazole and tetrahydrochinoxaline by the action of acetic anhydride and zinc chloride on nitroderivates of alkylanilines. 844.

HYACINTH (On the atmospheric humidity during the flower-formation of the). 206.

HYACINTHUS ORIENTALIS (On the favorable effect of 35° C. on the cell-formation in foliage-leaves of). 197.

Hydrology. J. VERSLUYS: "An hypothesis explaining some characteristics of clay". 104.

ICE-POINT (The) of the thermometer scale. 1017.

ILIO-COLONRING (Observations on the adhesive apparatus and the function of the) in the living larva of Amphioxus in the growth-period. 991.

IMMUNIZATION (On the mutual) in Aphthae epizoöticae and vaccine. 543.
INCREASE OF STATURE (On the continuance of the) in Holland. 685.
INNERVATION (On the segmental) of the skin of rays. 734.
IONS (Investigations on the free energy of a mixture of). 145.
ISOTHERMS (Preliminary) of ethylene. 1059.

JAEGER (F. M.), H. G. K. WESTENBRINK and F. A. VAN MELLE. Roentgenspectrographic investigations on the structure of the artificial ultramarines and the problem concerning their relations to the minerals Hauyne, Nosean, Sodalite, Lazurite and Nephelite. 249.

— and F. A. VAN MELLE. Investigations into the constitution of artificial ultramarines. II. On ultramarine-blue with high silica-content and on silver-, silversodium-, selenium- and silverselenium-ultramarines. 479.

— Investigations into the structure of the artificial ultramarines. III. On silver- and alcali-silver-ultramarines which are derivatives of GUIMET'S ultramarine-blue with high silica-content and on mixed alcali ultramarines and norm. butyl-silver-ultramarine. 885.

— and E. ROSENBOHM. On the exact determinations of the specific heat of solid substances between 0° and 1625° C. I. Method and apparatus. 905; II. The specific heat of platinum and tungsten. 1069.

JANSEN (Experiments with) and DONATH's antiberiberi-vitamin. 376.

JANSEN (Miss A. F. J). and W. H. KEESOM. The thermal expansion of silver between + 101° C. and — 253° C. 576.

KAPPERS (C. U. ARIËNS). Indices for the anthropology of the brain applied to Chinese, dolicho- and brachycephalic Dutch, foetuses and neonati. 81.

KEESOM (W. H.). On the diffraction of Röntgen-rays in fused sodium and potassium 341.

— and DONALD H. ANDREWS. The specific heats of solid substances at the temperatures attainable with the help of liquid helium. I. Measurements of the atomic heat of lead. 434.

— and L. VEGARD. On the luminescence produced by bombarding solidified gases with electric rays at the temperature of liquid helium. 514.

— and miss A. F. J. JANSEN. The thermal expansion of silver between + 101° C. and — 253° C. 576.

— The melting-curve of helium and the heat-theorem of NERNST. 952.

— and Miss H. VAN DER HORST.The fundamental pressure-coefficient of helium. 970.

KILOGRAMMES (On the variability of old standard). 1089.

KINOSHITA (M.) and W. J. DE HAAS. Rigidity of super-conductive metals. 598.

KLEIJN (D.) and E. H. BÜCHNER. The flocculation of agarsols through salt mixtures. 740.

KLUYVER (A. J.) and A. P. STRUYK. The so-called co-enzyme of alcoholic fermentation. 569.

— The first phases of the chemistry of the dissimilation of the hexoses. 871.

KOL (J. W. A. VAN). A one-four representation of a complex of twisted cubics on the points of space. 1010.

KRAMERS (H. A.). Investigations on the free energy of a mixture of ions. 145.

KROL (L. H.). On the occurrence of the Danauformation in Martapura (S. E. Borneo). 338.

KROMME (L. DE) and N. WATERMAN. On the isolation of a substance with carcinolytic properties from the reticulo-endothelial system. 499.

LAAR (J. J. VAN). On the course of the meltingpoint-line of helium at very low temperatures. 244.

— On the heats, resp. pressures of evaporation, sublimation and melting, also in the neighbourhood of the absolute zero, in connection with NERNST's so-called heat-theorem. (On the equation of state of solid substances. IV. Conclusion). 383.

— The melting-point line of helium and NERNST's theorem of heat. 957.

LAMBERT's LAW (The deviation from) for incandescent tungsten and molybdenum. 853.

LAPLAND (Preliminary report on the expedition to) for the observation of the total solar eclipse of June 29th 1927. 921.

LAZURITE (Roentgenspectrographic investigations on the structure of the artificial ultramarines and the problem concerning their relations to the minerals Hauyne, Nosean, Sodalite) and Nephelite. 249.

LEAD (Measurements of the atomic heat of). 434.

LEPTOSPIRA-STRAINS (Experiments on the differential characters of) with introductory remarks on the process of agglutination and lysis. 25.

LIGHT OXYDATION (The) of alcohols as contribution to the knowledge of the photochemical phenomena. 189.

LIQUIDS (Osmosis of ternary). General considerations. I. 761; II. 934; III. 1095; IV. 1106.

LUMINESCENCE (On the) produced by bombarding solidified gases with electric rays at the temperature of liquid helium. 514.

LUYTEN (IDA). On the favorable effect of 35° C. on the cell-formation in foliage-leaves of Hyacinthus orientalis. 197.

— Rapid flowering of early tulips. 502.

LYSIS (Experiments on the differential characters of Leptospira-strains with introductory remarks on the process of agglutination and). 25.

MA (WEN CHAO). A comparison of the form of the callosum and septum in Chinese, Philippino and Dutch brains. 329.

MAANEN (ADRIAAN VAN). The proper motions of the globular clusters Messier 13, 56 and 2 and their interval motions. 681.

MALARIA (On anophelism without) around Amsterdam. 61.

MARTAPURA (S. E. BORNEO) (On the occurrence of the Danauformation in). 338.

Mathematics. W. P. THIJSEN: "On the development of a function of two real variables into series of polynomials". 69.

— KARL MENGER: "Das Hauptproblem über die dimensionelle Struktur der Räume". 138.

— W. HUREWICZ: "Ueber stetige Bilder von Punktmengen". 159.

— R. WEITZENBÖCK: "Zum Beweise des zweiten Fundamentalsatzes der symbolischen Methode". 166.

— E. BORTOLOTTI: "On metric connexions with absolute parallelism". 216.

— R. WEITZENBÖCK: "Ueber Syzygien bei sechs binären Linearformen". 219.

— JAN DE VRIES: "A complex of conics". 268.

— J. A. SCHOUTEN: "The invariants of linear connexions with different transformations". 276.

— FRED. SCHUH: "Fusion of the existing theories of the irrational number into a new theory". 368.

— O. BOTTEMA: "The definition of Euclidean measure in the projective plane". 423.

Mathematics. — W. HUREWICZ: „Ueber das Verhältnis separabler Räume zu kompakten Räumen" 425.

— FRED. SCHUH: "Comparison of the simplified theories of the irrational number". 467.

— FRED. SCHUH: "Analytical introduction of the trigonometrical functions, adapted to the geometrical introduction". 474.

— H. J. VAN VEEN: "A representation on R_8 of the projectivities of point-fields and ray-fields". 552.

— H. J. VAN VEEN: "Systems of plane collineations". 559.

— JAN DE VRIES: "A congruence of plane monoids". 566.

— G. SCHAAKE: "The quadratic birational correspondence between two linear complexes of rays". 657.

— M. H. A. NEWMAN: "On the foundations of combinatory Analysis Situs". Additions and corrections. 670.

— K. MENGER: "Zusammenhangsstufen und Cantorsche Mannigfaltigkeiten". 705.

— K. MENGER: "Bemerkungen zur zweiten Untersuchung über allgemeine Metrik". 710.

— M. J. VAN UVEN: "Method of calculating the mean errors of the standard deviations coefficients of correlation and coefficients of regression with n linearly correlated variables". 823.

— JAN DE VRIES: "A representation of the congruence of REYE". 850.

— JAN DE VRIES: "Representation of a bilinear congruence of conics". 988.

— J. W. A. VAN KOL: "A one-four representation of a complex of twisted cubics on the points of space". 1010.

— M. J. VAN UVEN: "Linear adjustment of a set of pairs of numbers (x_k, y_k)". 1021.

MATTHIAS (E.), C. A. CROMMELIN and H. GARFIT WATTS. On the rectilinear diameter of ethylene. 1054.

MEDIUM (The influence of pressure on the reaction velocity and the function of the). 1039.

MEESTER (WILHELMA A. T. DE) and A. L. TH. MOESVELD. The influence of pressure on the reaction velocity and the function of the medium. 1039.

MEINESZ (F. A. VENING). Provisional results of determinations of gravity, made during the voyage of Her Majesty's submarine K XIII from Holland via Panama to Java. 743.

MELLE (F. A. VAN), F. M. JAEGER and H. G. K. WESTENBRINK. Roentgenspectrographic investigations on the structure of the artificial ultramarines and the problem concerning their relations to the minerals Hauyne, Nosean, Sodalite, Lazurite and Nephelite. 249.

— and F. M. JAEGER. Investigations into the constitution of artificial ultramarines. II. On ultramarine-blue with high silica-content and on silver-, silversodium-, selenium- and silverselenium-ultramarines. 479.

— Investigations into the structure of the artificial ultramarines. III. On silver- and alcali-silver ultramarines which are derivatives of GUIMET'S ultramarine-blue with high silica content, and on mixed alcali-ultramarines and norm. butyl-silver-ultramarine. 885.

MELTING-CURVE (The) of helium and the heat-theorem of NERNST. 952.

MELTINGPOINT-LINE (On the course of the) of helium at very low temperatures. 244.

— (The) of helium and NERNST'S theorem of heat. 957.

MENGER (KARL). Das Hauptproblem über die dimensionelle Struktur der Räume. 138.
— Zusammenhangsstufen und Cantorsche Mannigfaltigkeiten. 705.
— Bemerkungen zur zweiten Untersuchung über allgemeine Metrik. 710.
MENTAL FACULTIES (Heredity of). 769.
MESSIER 13, 56 and 2 (The proper motions of the globular clusters) and their internal motions. 681.
METALS (Rigidity of super-conductive). 598.
METEORITE (The) of Ellemeet. 724.
Meteorology. M. PINKHOF: "Contribution to the explanation of complex halos". 172.
METRIK (Bemerkungen zur zweiten Untersuchung über allgemeine). 710.
MICHELS (A.), P. GEELS and Miss C. VERAART. Influence of the pressure on the electric conductivity of gold. 47.
MICHELS (A.) and E. C. F. TEN HAAF. The three-phase-lines of the systems: water-orthocresol, water-metacresol and water-paracresol. 52.
— and F. COETERIER: "The ice-point of the thermometer scale". 1017.
Microbiology. W. SCHÜFFNER and ACHMED MOCHTAR: "Experiments on the differential characters of Leptospirastrains with introductory remarks on the process of agglutination and lysis". 25.
— N. L. WIBAUT-ISEBREE MOENS: "On the disappearance of bacillus typhi from water". 444.
— S. L. SCHOUTEN: "On digestion in protozoa". 619.
— A. PIJPER: "On differential fibration". 1062.
MIDBRAIN (Structural parallelism in the) and tweenbrain of teleosts and of birds. 695.
MINERALOGICAL COMPOSITION (A contribution regarding the) of some of the soils of the Netherlands. 365.
Mineralogy. J. H. DRUIF: "A contribution regarding the mineralogical composition of some of the soils of the Netherlands. 365.
MINNAERT (M.) and G. C. HERINGA. Concerning an optic phenomenon in tendons. 594.
— and A. PANNEKOEK. Preliminary report on the expedition to Lapland for the observation of the total solar eclipse of June 29th. 1927. 921.
MIXTURES (The flocculation of agarsols through salt). 740.
MOCHTAR (ACHMED) and W. SCHÜFFNER. Experiments on the differential characters of Leptospira-strains with introductory remarks on the process of agglutination and lysis. 25.
MOENS (N. L. WIBAUT—ISEBREE). On the disappearance of bacillus typhi from water. 444.
MOESVELD (A. L. TH.) and WILHELMA A. T. DE MEESTER. The influence of pressure on the reaction velocity and the function of the medium. 1039.
MOLYBDENUM (The deviation from LAMBERT's law for incandescent tungsten and). 853.
MONOIDS (A congruence of plane). 566.
MULLER (J.). On the occurrence of vascularized Enamel-organs. 298.
MUSCLES (The action of veratrin on skeletal). 235.
MUSKENS (L. J. J.). An anatomo-physiological study of the supra-vestibular tractus in Columba domestica. 455.

MIJSBERG (W. A.) and H. J. T. BIJLMER. Report on a fossil found at Trinil in 1926, and erroneously considered as the remains of a skull of Pithecanthropus. 126.

NECATOR (The Nemas Anchylostoma and). 113; II. 581.

— (New researches on the larvae of Anchylostoma duodenale DUB. and) americanus STILES. 581.

NEMAS ANCHYLOSTOMA (The) and Necator. 113; II. 581.

NEON (The duration of metastable states of) argon and helium. 33.

— (The vapour pressures of solid and liquid). 362.

NEOSTRIATUM (The connection of the cortex with the) and Palaeostriatum in rabbits. 811.

NEPHELITE (Roentgenspectrographic investigations on the structure of the artificial ultramarines and the problem concerning their relations to the minerals Hauyne, Nosean, Sodalite, Lazurite and). 249.

NERNST (On the heats, resp. pressures of evaporation, sublimation and melting, also in the neighbourhood of the absolute zero, in connection with the so-called heat-theorem of). (On the equation of state of solid substances. IV. Conclusion). 383.

— (The melting-curve of helium and the heat-theorem of). 952.

— (The melting-point line of helium and the theorem of heat of). 957.

NEWMAN (M. H. A.) On the foundations of combinatory Analysis Situs. Additions and corrections. 670.

NIEUWENKAMP (W.). On M. BEREK'S Methode der charakteristischen Gangunterschiedsverhältnisse. 534.

— The meteorite of Ellemeet. 724.

NOSEAN (Roentgenspectrographic investigations on the structure of the artificial ultramarines and the problem concerning their relations to the minerals Hauyne). Sodalite, Lazurite and Nephelite. 249.

NUMBER (Fusion of the existing theories of the irrational) into a new theory. 368.

— (Comparison of the simplified theories of the irrational). 467.

NUMBERS (x_k, y_k) (Linear adjustment of a set of pairs of). 1021.

OIL (The essential) from the leaves of Caesalpinia Sappan L. 840.

OSMOSIS of ternary liquids. General considerations. I. 761; II. 934; III. 1095; IV. 1106.

OIJEN (C. F. VAN). On the mutual immunization in Aphthae epizoöticae and vaccine. 543.

Palaeobotany. O. POSTHUMUS: "Some remarks concerning the palaeozoic flora of Djambi, Sumatra. 628.

Palaeontology. W. A. MIJSBERG and H. J. T. BIJLMER: "Report on a fossil found at Trinil in 1926, and erroneously considered as the remains of a skull of Pithecanthropus". 126.

— EUG. DUBOIS: "The so-called new Pithecantropus skull" 134.

— F. FLORSCHÜTZ: "On a Dryasflora-bearing deposit in the Netherlands". 344.

— TAN SIN HOK: "Discoasteridae incertae sedis". 411.

PALAEOSTRIATUM (The connection of the cortex with the Neostriatum and) in rabbits. 811.

PALAEOZOIC FLORA (Some remarks concerning the) of Djambi, Sumatra. 628.

PANNEKOEK (A.) and M. G. J. MINNAERT. Preliminary report on the expedition to Lapland for the observation of the total solar eclipse of June 29th 1927. 921.

PARALLELISM (On metric connexions with absolute). 216.

Pathology. N. H. SWELLENGREBEL, A. DE BUCK and E. SCHOUTE: "On anophelism without malaria around Amsterdam" 61.

— N. WATERMAN and L. DE KROMME: On the isolation of a substance with carcinolytic properties from the reticulo-endothelial system". 499.

Pathology (Comparative) C. F. VAN OIJEN: On the mutual immunization in Aphthae epizoöticae and vaccine. 543.

PHASE-LINES (The three) of the systems: water-orthocresol, water-metacresol and water-paracresol. 52.

PHASES (Equilibria in systems in which) separated by a semy-permeable membrane. XIX. 282; XX. 401; XXI. 521; XXII. 610; XXIII. 635.

PHYCOMYCES BLAKESLEEANUS BURGEFF (The influence of temperature on the respiration of.) 674.

Physics. T. L. DE BRUIN: "Note on regularities in the spectra of fluorine and chlorine". 20.

— H. B. DORGELO and T. P. K. WASHINGTON: "The duration of metastable states of neon, argon and helium" 33.

— A. MICHELS, P. GEELS and Miss C. VERAART: "Influence of the pressure on the electric conductivity of gold" 47.

— A. MICHELS and E. C. F. TEN HAAF: "The three-phase-lines of the systems: water-orthocresol, water-metacresol and water-paracresol". 52.

— A. C. S. VAN HEEL: "On the absorption-spectrum of chromium-oxy-chloride". 95.

— H. A. KRAMERS: "Investigations on the free energy of a mixture of ions". 145.

— J. J. VAN LAAR: "On the course of the meltingpoint-line of helium at very low temperatures". 244.

— W. H. KEESOM: "On the diffraction of Röntgen-rays in fused sodium and potassium". 341.

— J. H. DE BOER: "On some phenomena which are caused by the low indices of refraction of alkali boron fluorides. 350.

— S. GOUDSMIT: "The structure of the calcium fluoride band λ 6087". 355.

— C. A. CROMMELIN and R. O. GIBSON: "The vapour pressures of solid and liquid neon". 362.

— J. J. VAN LAAR: „On the heats, resp. pressures of evaporation, sublimation and melting, also in the neighbourhood of the absolute zero, in connection with NERNST'S so-called heat-theorem. (On the equation of state of solid substances. IV. Conclusion) 383.

— W. H. KEESOM and DONALD H. ANDREWS: "The specific heats of solid substances at the temperatures attainable with the help of liquid helium. I. Measurements of the atomic heat of lead." 434.

— L. VEGARD and W. H. KEESOM: "On the luminescence produced by bombarding solidified gases with electric rays at the temperature of liquid helium." 514.

— W. H. KEESOM and Miss A. F. J. JANSEN: "The thermal expansion of silver between + 101° C. and — 253° C. 576.

— W. J. DE HAAS and M. KINOSHITA: "Rigidity of super-conductive metals." 598.

— F. A. VENING MEINESZ: Provisional results of determinations of gravity, made during the voyage of Her Majesty's submarine K XIII from Holland via Panama to Java." 743.

— C. ZWIKKER: "The deviation from LAMBERT'S law for incandescent tungsten and molybdenum." 853.

— P. CLAUSING: "On the mean values of straight and curved chords of geometrical bodies." 860.

— T. L. DE BRUIN: "The structure of the fluorine spectrum (F. I.)." 944.

Physics. W. H. KEESOM: "The melting-curve of helium and the heat-theorem of NERNST." 952.

— J. J. VAN LAAR: "The melting-point line of helium and NERNST'S theorem of heat." 957.

— W. H. KEESOM and Miss H. VAN DER HORST: "The fundamental pressure-coefficient of helium". 970.

— A. MICHELS and F. COETERIER: The ice-point of the thermometer scale" 1017.

— E. MATTHIAS, C. A. CROMMELIN and H. GARFIT WATTS: On the rectilinear diameter of ethylene." 1054.

— C. A CROMMELIN and H. GARFIT WATTS: "Vapour tensions of liquid ethylene." 1057.

— C. A. CROMMELIN and H. GARFIT WATTS: "Preliminary isotherms of ethylene." 1059.

— L. H. SIERTSEMA: "On the variability of old standard kilogrammes. 1089.

— J. CLAY: "Penetrating radiation". 1115.

Physiology. H. ZWAARDEMAKER: Radiation-substances and cardiac hormones." 184.

— S. DE BOER: "The action of veratrin on skeletal muscles. At the same time an application of our knowledge of the segmentation of the frog's M. gastrocnemius on the problem of the refractory stage of skeletal muscles after veratrin poisoning". 235.

— C. EYKMAN: Experiments with JANSEN and DONATH'S antiberiberi-vitamin. 376.

— H. ZWAARDEMAKER: "On some properties of the radiation-substances (with weak radiation)." 420.

— L. J. J. MUSKENS: "An anatomo-physiological study of the supra-vestibular tractus in Columba domestica." 455.

— H. ZWAARDEMAKER: "On the origin of the radiation substances and their action on the heart" 624.

— LAURETTA BENDER: An experimental study of the cerebellar control of the vocal organs." 715.

— J. TEN CATE: "On the segmental innervation of the skin of rays." 734.

— G. G. J. RADEMAKER: "On the physiology of reflex-standing." 796.

PINKHOF (M.) Contribution to the explanation of complex halos. 172.

PISUM SATIVUM (On the retarding influence of the longitudinal component of gravity on the geotropic reaction of roots of). 930.

PITHECANTHROPUS (Report on a fossil found at Trinil in 1926, and erroneously considered as the remains of a skull of). 126.

— (The so-called new skull of). 134.

PLANE (The definition of Euclidean measure in the projective). 423.

PLATINUM (The specific heat of) and tungsten. 1069.

POINT-FIELDS AND RAY-FIELDS (A representation on R_8 of the projectivities of). 552.

POLYNOMIALS (On the development of a function of two real variables into series of). 69.

POLYOXY-COMPOUNDS (Some remarks on the condensation products of) with chloral. 55.

POSTHUMUS (O.). Some remarks concerning palaeozoic flora of Djambi, Sumatra. 628.

POTASSIUM (On the diffraction of Röntgen-rays in diffused sodium and). 341.

PRESSURE (The compacting) of sediments. 1004.

— (The influence of) on the reaction velocity and the function of the medium. 1039.

PROTOZOA (On digestion in). 619.

PSYCHIC DIFFERENCES (A statistic inquiry into the) between the generations of to-day and former times. 958.

Psychology. D. WIERSMA: "A statistic inquiry into the psychic differences between the generations of to-day and former times". 958.

PUNKTMENGEN (Ueber stetige Bilder von). 159.

PIJPER (A.). On differential fibration. 1062.

RABBITS (The connection of the cortex with the Neostriatum and Palaeostriatum in) 811.

RACES (On the origin of human). 320.

RADEMAKER (G. G. J.). On the physiology of reflex-standing. 796.

RADIATION (Penetrating). 1115.

RADIATION-SUBSTANCES and cardiac hormones. 184.

— (On some properties of the) with weak radiation. 420.

— (On the origin of the) and their action on the heart. 624.

RÄUME (Das Hauptproblem über die dimensionelle Struktur der). 138.

— (Ueber das Verhältnis separabler) zu kompakten Räumen. 425.

RAYS (The quadratic birational correspondence between two linear complexes of). 657.

RAYS (Raja clavata) (On the segmental innervation of the skin of). 734.

REFLEX-STANDING (On the physiology of). 796.

REFRACTION (On some phenomena which are caused by the low indices of) of alkali boron fluorides. 350.

RETICULO-ENDOTHELIAL SYSTEM (On the isolation of a substance with carcinolytic properties from the). 499.

REYE (A representation of the congruence of). 850.

RHIZOCEPHALA (On the larval forms of). 293.

RIGIDITY of super-conductive metals. 598.

ROGGEVEEN (P.). Profiles through the synclines of Comblain au Pont and Chanxhe. 346.

ROMBURGH (P. VAN). The essential oil from the leaves of Caesalpinia Sappan L. (Provisional communication) 841.

— and H. W. HUYSER. Formation of derivatives of dihydrobenzimidazole and tetrahydrochinoxaline by the action of acetic anhydride and zinc chloride on nitroderivates of alkylanilines. 844.

RÖNTGEN-RAYS (On the diffraction of) in fused sodium and potassium. 341.

ROSENBOHM (E.) and F. M. JAEGER. On the exact determination of the specific heat of solid substances between 0° and 1625° C. I. Method and apparatus 905; II. The specific heat of platinum and tungsten. 1069.

SCHAAKE (G.). The quadratic birational correspondence between two linear complexes of rays. 657.

SCHOUTE (E.), N. H. SWELLENGREBEL and A. DE BUCK. On anophelism without malaria around Amsterdam. 61.

SCHOUTEN (J. A.). The invariants of linear connexions with different transformations. 276.

SCHOUTEN (S. L.). On digestion in Protozoa. 619.

SCHREINEMAKERS (F. A. H.). Equilibria in systems in which phases, separated by a semi-permeable membrane. XIX. 282; XX. 401; XXI. 521; XXII. 610; XXIII. 635.

— Osmosis of ternary liquids. General considerations. I. 761; II. 934; III. 1095; IV. 1106.

SCHÜFFNER (W.) and ACHMED MOCHTAR. Experiments on the differential characters of Leptospira-strains with introductory remarks on the process of agglutination and lysis. 25

SCHUH (FRED.). Fusion of the existing theories of the irrational number into a new theory. 368.

— Comparison of the simplified theories of the irrational number. 467.

— Analytical introduction of the trigonometrical functions, adapted to the geometrical introduction. 474.

SCHUURMANS STEKHOVEN JR. (J. H.) vide STEKHOVEN JR. (J. H. SCHUURMANS).

SEDIMENTS (The compacting pressure of). 1004.

SEEDLINGS (On the so-called traumatotropic curvatures of oat). 756.

SEPTUM (A comparison of the form of the callosum and) in Chinese, Philippino and Dutch brains. 329.

Serology. C. H. H. SPRONCK, K. HOEFNAGEL, W. HAMBURGER and A. J. BOEKELMAN: „Concerning the transmutant of the tubercle-bacillus *BTTx* as tuberculosis diagnosticum. 643.

SIERTSEMA (L. H.) On the variability of old standard kilogrammes. 1089.

SILVER (The thermal expansion of) between + 101° C. and — 253° C. 576.

SKULL OF PITHECANTHROPUS (Report on a fossil found at Trinil in 1926, and erroneously considered as the remains of a). 126.

SKULL (The so-called new Pithecanthropus). 134.

SODALITE (Roentgenspectrographic investigations on the structure of the artificial ultramarines and the problem concerning their relations to the minerals Hauyne, Nosean,) Lazurite and Nephelite. 249.

SODIUM (On the diffraction of Röntgen-rays in diffused) and potassium. 341.

SOILS OF THE NETHERLANDS (A contribution regarding the mineralogical composition of some of the). 365.

SOLAR ECLIPSE (Preliminary report on the expedition to Lapland for the observation of the total) of June 29th 1927. 921.

SPACE (A one-four representation of a complex of twisted cubics on the points of). 1010.

SPECTRA (Note on regularities in the) of fluorine and chlorine. 20.

SPECTRUM (On the absorption-) of chromium-oxy-chloride. 95.

— (The structure of the fluorine) (F. I.). 944.

SPRONCK (C. H. H.), K. HOEFNAGEL, W. HAMBURGER and A. J. BOEKELMAN. Concerning the transmutant of the tubercle-bacillus *BTTx* as tuberculosis-diagnosticum. 643.

STANDING (On the physiology of reflex-). 796.

STATURE (On the continuance of the increase of) in Holland. 685.

STEKHOVEN JR. (J. H. SCHUURMANS). The Nemas Anchylostoma and Necator, 113; II. 581.

STRUYK (A. P.) and A. J. KLUYVER. The so-called co-enzyme of alcoholic fermentation. 569.

— The first phases of the chemistry of the dissimilation of the hexoses. 871.

SUBSTANCES (On growth-accelerating) in the coleoptile of Avena Sativa. 10.

SUBSTANCES (On the equation of state of solid). IV. Conclusion. 383.
— (The specific heats of solid) at the temperatures attainable with the help of liquid helium. I. Measurements of the atomic heat of lead. 434.
— (On the occurrence of growth-accelerating and growth-retarding). 728.
— (On the exact determination of the specific heat of solid) between 0° and 1625° C I. Method and apparatus. 905; II. The specific heat of platinum and tungsten. 1069.
SWELLENGREBEL (N. H.), A. DE BUCK and E. SCHOUTE. On anophelism without malaria around Amsterdam. 61.
SYMBOLISCHEN METHODE (Zum Beweise des zweiten Fundamentalsatzes der). 166.
SYMBOLS OF ZONES (On quaternary). 980.
SYNCLINES (Profiles through the) of Comblain au Pont and Chanxhe. 346.
SYZYGIEN (Ueber) bei sechs binären Linearformen. 219.
TAN SIN HOK. Discoasteridae incertae sedis. 411.
TELEOSTS (Structural parallelism in the midbrain and tweenbrain of) and of birds. 695.
TEMPERATURES (On the course of the meltingpoint-line of helium at very low). 244.
TENDELOO (NANNY). On the so-called traumatotropic curvatures of oat seedlings. 756.
TENDONS (Concerning an optic phenomenon in). 594.
TETRAHYDROCHINOXALINE (Formation of derivatives of dihydrobenzimidazole and) by the action of acetic anhydride and zinc chloride on nitroderivates of alkylanilines. 844.
THERMOMETER SCALE (The ice-point of the). 1017.
THIJSEN (W. P.). On the development of a function of two real variables into series of polynomials. 69.
TRANSFORMATIONS (The invariants of linear connexions with different). 276.
TRAUMATOTROPIC CURVATURES (On the so-called) of oat seedlings. 756.
TRIGONOMETRICAL FUNCTIONS (Analytical introduction of the), adapted to the geometrical introduction. 474.
TUBERCLE-BACILLUS BTTx. (Concerning the transmutant of the) as tuberculosis-diagnosticum. 643.
TULIPS (Rapid flowering of early). 502.
TUNGSTEN (The deviation from LAMBERT's law for incandescent) and molybdenum. 853.
— (The specific heat of platinum and). 1069.
TWEENBRAIN (Structural parallelism in the midbrain and) of teleosts and of birds. 695.
ULTRAMARINES (Roentgenspectrographic investigations on the structure of the artificial) and the problem concerning their relations to the minerals Hauyne, Nosean, Sodalite, Lazurite and Nephelite. 249.
— (Investigations into the constitution of artificial) II. On ultramarine-blue with high silica-content and on silver-, silversodium-, selenium- and silverselenium-ultramarines. 479.
— (Investigations into the structure of the artificial) III. On silver-and alcali-silver ultramarines which are derivatives of GUIMET'S ultramarine-blue with high silica content, and on mixed alcali-ultramarines and norm. butyl-silver-ultramarine. 885.
UVEN (M. J. VAN) Method of calculating the mean errors of the standard deviations, coefficients of correlation, and coefficients of regression, with n linearly correlated variables. 823.
— Linear adjustment of a set of pairs of numbers ($*k'_9k$). 1021.
VACCINE (On the mutual immunization in Aphthae epizoöticae and). 543.

VAPOUR PRESSURES (The) of solid and liquid neon. 362.

VAPOUR TENSIONS of liquid ethylene. 1057.

VARIABLES (On the development of a function of two real) into series of polynomials. 69.

— (Method of calculating the mean errors of the standard deviations, coefficients of correlation, and coefficients of regression, with n linearly correlated) 823.

VEEN (H. J. VAN) A representation on R_8 of the projectivities of point-fields and ray-fields. 552.

— Systems of plane collineations. 559.

VEGARD (L.) and W. H. KEESOM. On the luminescence produced by bombarding solidified gases with electric rays at the temperature of liquid helium. 514.

VELOCITY (The influence of pressure on the reaction) and the function of the medium. 1039.

VENING MEINESZ (F. A.) vide MEINESZ (F. A. VENING.)

VERAART (MISS C.), A. MICHELS and P. GEELS. Influence of the pressure on the electric conductivity of gold. 47.

VERATRIN (The action of) on skeletal muscles. 235.

VERSLUYS (J.) An hypothesis explaining some characteristics of clay. 104.

— Earth movements caused by coalmining. 864.

— The compacting pressure of sediments. 1004.

VESTIBULAR TRACTUS (An anatomo-physiological study of the supra-) in Columba domestica. 455.

VITAMIN (Experiments with JANSEN and DONATH'S antiberiberi-) 376.

VOCAL ORGANS (An experimental study of the cerebellar control of the). 715.

VRIES (JAN DE). A complex of conics. 268.

— A congruence of plane monoids. 566.

— A representation of the congruence of REYE. 850.

— Representation of a bilinear congruence of conics. 988.

WASHINGTON (F. P. K.) and H. B. DORGELO. The duration of metastable states of neon, argon and helium. 33.

WATER. The three-phase-lines of the systems: water-orthocresol, water-metacresol and water-paracresol. 52.

WATERMAN (N.) and L. DE KROMME. On the isolation of a substance with carcinolytic properties from the reticulo-endothelial system. 499.

WATTS (H. GARFIT), E. MATTHIAS and C. A. CROMMELIN. On the rectilinear diameter of ethylene. 1054.

WATTS (H. GARFIT) and C. A. CROMMELIN. Vapour tensions of liquid ethylene. 1057.

— and C. A. CROMMELIN. Preliminary isotherms of ethylene. 1059.

WEITZENBÖCK (R.). Zum Beweise des zweiten Fundamentalsatzes der symbolischen Methode. 166.

— Ueber Syzygien bei sechs binären Linearformen. 219.

WENT (F. W.). On growth-accelerating substances in the coleoptile of Avena sativa. 10.

WESTENBRINK (H. G. K.), F. M. JAEGER and F. A. VAN MELLE. Roentgenspectrographic investigations on the structure of the artificial ultramarines and the problem concerning their relations to the minerals Hauyne, Nosean, Sodalite, Lazurite and Nephelite. 249.

WIBAUT (J. P.) and G. L. C. LA BASTIDE. On some derivatives of di- (2-pyridyl)-amine, and on tri- (2-pyridyl)-amine. 664.

WIBAUT-ISEBREE MOENS (N. L.). vide MOENS (N. L. WIBAUT-ISEBREE).

WIERSMA (D.). A statistic inquiry into the psychic differences between the generations of to-day and former times. 958.

WIJHE (J. W. VAN). Observations on the adhesive apparatus and the function of the ilio-colonring in the living larva of Amphioxus in the growth-period. 991.

ZONES (On quaternary symbols of). 980.

Zoology. J. H. SCHUURMANS STEKHOVEN JR.: "The Nemas Anchylostoma and Necator". 113.

— H. BOSCHMA: "On the larval forms of Rhizocephala". 293.

— H. R. HOOGENRAAD: "On the structure, life-history and development of Hedrocystis pellucida HERTW. and LESS". 308.

— J. H. SCHUURMANS STEKHOVEN JR.: "The Nemas Anchylostoma and Necator. II. New researches on the larvae of Anchylostoma duodenale DUB. and Necator Americanus STILES". 581.

— J. W. VAN WIJHE: "Observations on the adhesive apparatus and the function of the ilio-colonring in the living larva of Amphioxus in the growth-period. 991.

ZUSAMMENHANGSSTUFEN und Cantorsche Mannigfaltigkeiten. 705.

ZWAARDEMAKER (H.) Radiation-substances and cardiac hormones. 184.

— On some properties of the radiation-substances (with weak radiation). 420.

— On the origin of the radiation substances and their action on the heart. 624.

ZWIKKER (C.). The deviation from LAMBERT'S law for incandescent tungsten and molybdenum. 850.